

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

Claim 8 is currently being cancelled without prejudice or disclaimer.

Claims 1, 3-6, 10 and 11 are currently being amended.

This amendment and reply amends claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-7 and 9-14 are now pending in this application.

Request for Consideration of Information Disclosure Statement (IDS):

Applicant respectfully requests that the PTO evidence the consideration of the IDS filed on December 23, 2003, by returning an initialed copy of the PTO form SB/08 submitted with that IDS in the next PTO correspondence to Applicant.

Claim Rejections – Prior Art:

In the Office Action, claims 1-4 and 7-11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2002/0144005 to Mae et al. (“Mae”); and claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mae in view of U.S. Patent Publication No. 2003/0086122 to Parry (“Parry”). These rejections are traversed with respect to the presently pending claims under rejection, for at least the reasons given below.

As recited in independent claim 1, an image forming apparatus comprises a plurality of processing sections. The processing sections execute controls based on the data stored in the storage devices of the processing sections. The storage section of claim 1 stores basic data which is an original combination of the data stored in the storage devices. The receiving section of claim 1 receives overwrite data from outside. A first control section executes a control to store the overwrite data in the storage section. An overwrite section overwrites the data in the storage device of the associated processing section, using the overwrite data received by the receiving section. If data overwrite fails during the data overwrite operation, or if power is disrupted during the data overwrite, there would be such cases that normal operation cannot be started after the apparatus is rebooted or power is turned on again.

The presently claimed invention aims to cope with the above cases, and thus includes a confirming section and second control section. The confirming section confirms whether the image forming apparatus is operable with a combination of the data stored in the storage devices immediately after the overwrite section overwrites the data or immediately after power to the apparatus is turned on. The second control section executes, when the confirming section confirms that the image forming apparatus is not operable, a control to overwrite the data in the storage devices on the basis of a latest optimal combination of the basic data and overwrite data stored in the storage section. Thus, no mismatching of the data between the processing sections occurs. Accordingly, the operation of the image forming apparatus can normally restart even if data overwrite is incomplete. Mae fails to disclose the combination of the confirming section and second control section as specifically recited in claim 1.

Mae discloses an image formation apparatus that rewrites firmware with data received from outside. A CPU 111 executes the basic process of image formation apparatus 11 shown in FIG. 11. The image formation apparatus 11 commences the process by having power

turned on. At each control module, an initial setting such as clearing the memory and the setting the standard mode is carried out (See step S1101). Then, a process of input reception (step S1103) and copy control (step S1105) is repeatedly executed until a firmware reception notification is issued from printer controller 21. When a firmware reception notification is issued from printer controller 21 and the firmware rewrite process permit flag is turned on, control proceeds to step 109 where the rewrite permit flag is cleared. At step S1111, a firmware rewrite process is carried out.

Mae, however, does address the problem caused in the case where the power is disrupted during the firmware rewrite process, for example, nor does Mae suggest the combination of the of the confirming section and second control section as specifically recited in claim 1. In the case of Mae, firmware in some control modules may be lost in the rewrite process. The lost firmware is not restored in each control module. As a result, the image formation apparatus 11 is unable to execute the process of input reception and copy control. Even if a firmware reception notification is issued from printer controller 21, such a notification would not be recognized in image formation apparatus 11.

In the presently claimed invention with the combination of the of the confirming section and second control section, if data overwrite fails during the data overwrite operation, or if power is disrupted during the data overwrite, the basic data and the overwrite data stored in the storage section are selected into the latest optimal combination for the present configuration of the processing sections. Accordingly, the image forming apparatus is kept operable. This feature is not suggested in the Mae apparatus.

Parry was cited for disclosing other features of the claims, but fails to cure the deficiencies of Mae.

Independent claims 10 and 11 include features corresponding to those discussed above with respect to claim 1 in the context of an apparatus with "means" limitations, and in the context of a method claim, respectively.

The dependent claims are patentable for at least the same reasons as their respective independent claims, as well as for further patentable features recited therein.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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